

Client Drawer Quick Start Guide

Client Drawer front features

The table and picture below show each major Client Drawer front feature.

Number	Part	Function
1	Thumbscrews for cover lock	Lock cover in place
2	Pull lip for cover removal	To remove cover from chassis
3	Client front access panel	Up to 10 Clients or Mini PCs per chassis via internally adjustable slots
4	Pull Handle	For pulling chassis from rack. Do not use to carry chassis.



Figure 1 Client Drawer Front Features

Client Drawer rear features

The table and picture below show each major Client Drawer rear feature.

Number	Part	Function
1	Power supply	Redundant 600W 100-2220V power supply. Up to 588W of 12V power split between 10 internal cables.
2	Exhaust fans	4 x 50MM front to back exhaust fans
3	Access panel	Pass through access panel (1" x 2") for non-keystone attached cables
4	Keystone panel	Configurable keystone I/O panel. See Keystone chart below
5	Rackmount rails	19" Rack mount rail system.
6	Alarm acknowledgement	Suppress alarm sound for failed or missing power source



Figure 2 Client Drawer Rear Features



**Client Drawer
Keystone**

5 keystone ports available per client

Optional keystones include:

- RJ45 CAT 6
 - Via CAT 6 cable
- HDMI 2.0 4K 60Hz Support
 - Via HDMI 2.0 to HDMI 2.0 cable
 - USB-C to HDMI Cable
- USB A 3.1 (5Gbps)
 - Via USB A to USB A cable
- USB C (10Gbps)
 - Via USB C to USB C cable
- Fiber LC
 - Via LC-to-LC OM2 Cable

Default configuration:

Ports 1 & 2 – HDMI

Ports 3 & 4 – USB A 3.1

Port 5 – RJ45 network

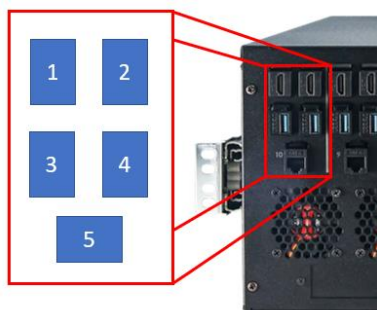


Figure 3 Client Drawer Keystone

Introduction

About this guide

This quick start guide shows the components and features of the Client Drawer; how to install and remove clients the chassis;

Client Drawer overview

Client Drawers are 4U high, that hold up to 10-clients or mini-PCs in variable size slots. The chassis mounts in a standard 19” rack, with the typical configuration being a 4-post cabinet. The client drawer provides power, and configurable interface ports to the external rear of the chassis for each client.

The picture below shows mini-PCs installed in a Client Drawer with connections to both an AV matrix and networking.

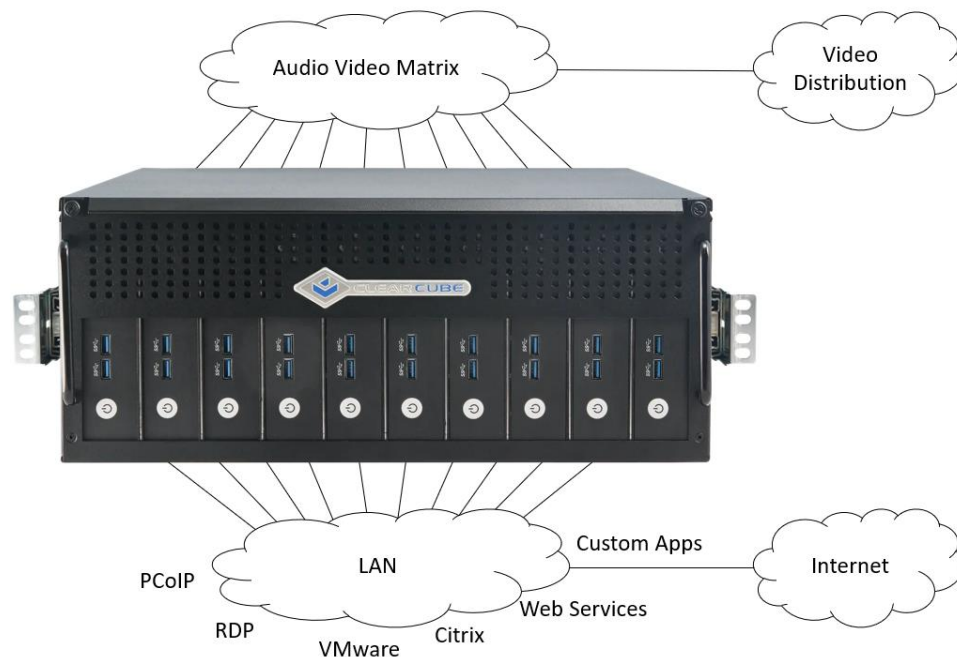


Figure 4 Example Deployment Options

Power Supply

Power Supply

The system has a dual redundant power supply auto switching unit. The supplies support 90V through 264V. Each power supply is a 600W PSU capable of supply power to the entire chassis. Internal to the chassis, each 12V power cable will have power once either power supply is connected to a power source and the switch is in the on position.

Note: if only one power supply has power, an alarm will sound. To stop the alarm, either connect the second power supply to a power source or press the alarm acknowledgement button.

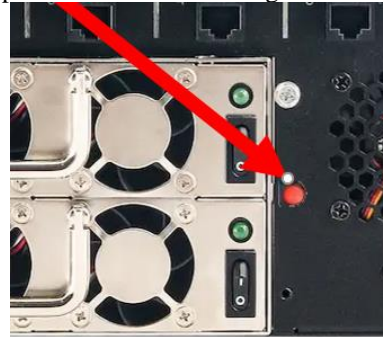


Figure 5 Alarm acknowledgement button

The green light above the power switch on each power supply will illuminate when the supply is connected to a power source and the switch is in the **ON** position.



Powering Clients

Once the chassis is connected to the power source, the power supply must be switched to the on position to operate devices installed in the chassis.

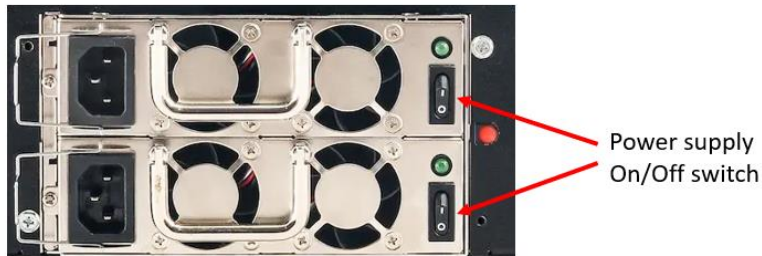


Figure 6 On/Off Switch

Each individually managed for power on/power off once the chassis has power. The available space in front access panel allows for ClearCube clients, mini-PCs, or Intel H or K based NUC devices. Pressing an individual power button will allow for independent power control.

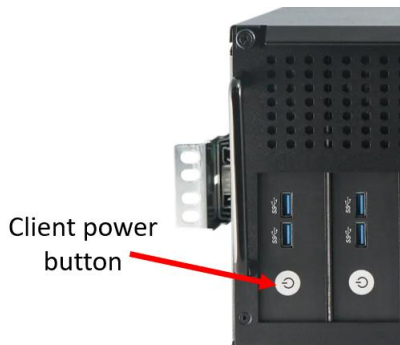


Figure 7 Individual client power

Chassis Internals

About the cabling

Traditionally the Client Drawer is preinstalled with clients and cables attached.

NOTE: The Client Drawer does support hot-swap replacement of units. When installing drawers in a rack make sure enough external cabling is available to pull the drawer forward 10 inches to allow for removal and insertion of units.

The internal cabling of the Client Drawer consists of a 1:1 pass through connection from the rear keystone to the unit in the front of the drawer. Typical cable lengths are 18" which provides enough slack to attach or remove cables while the device is outside of the drawer.



Figure 8 Cabling units outside of drawer



Securing Cables

The picture below shows how the cables are secured to the cable support bridge in the middle of the chassis. They are secured in place via hook and loop strips for easy removal and adjustments.



Figure 9 Securing cables

Adjusting Slots The Client Drawer has adjustable slots to enable devices of different thickness to fit inside the chassis without having to be concerned with fixed positions. The chassis is designed for a maximum of 10 clients with either the native ClearCube form factor or the Intel NUC K form factor. For the Intel NUC H form factor a total of 7 units can be installed.

To add or remove a slot. Install or loosen the screw from the bracket locking nut. This allows the bracket to freely slide left or right on the mounting rail.

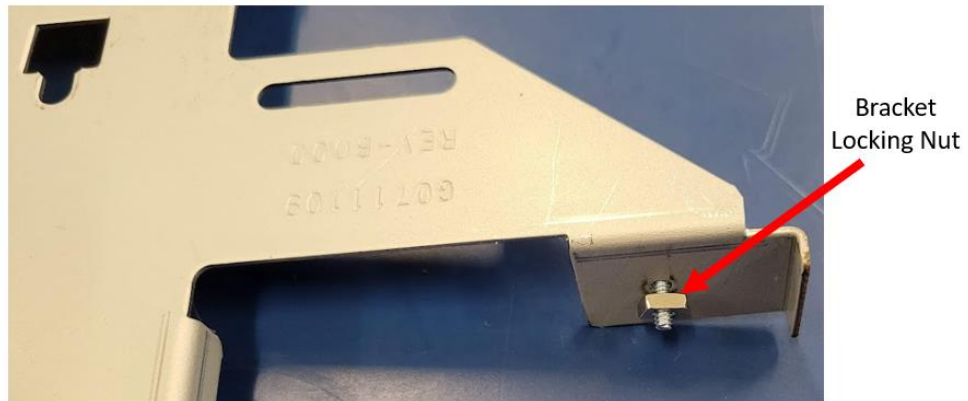


Figure 10 Locking nut

On the left side of the chassis the locking nut capture hole should be used to insert the nut and allow the bracket screw to be pushed to the right to the next position on the guide.

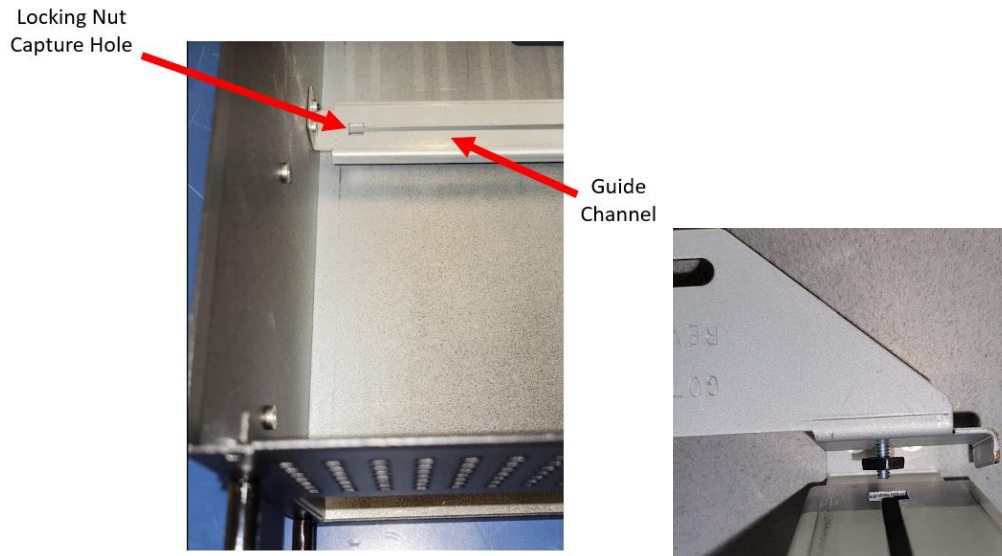


Figure 11 Mounting slot

Once the bracket is in place. Using a #2 screwdriver, the bracket can be locked in position by tightening the screw. There is a capture mechanism built into the guide rail to prevent the nut from spinning while the screw is being tightened.

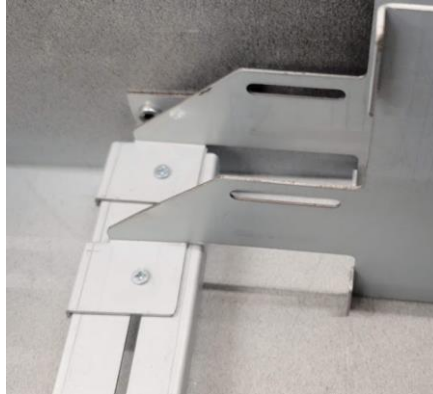


Figure 12 Bracket in position with locking screw

Inserting Clients

The Client Drawer is a flexible chassis that was designed to accept either ClearCube native form factor units or Intel NUC H or K units. Inserting a ClearCube unit it is simply a drop in place installation once the slots are properly adjusted and cables are attached.



Figure 13 ClearCube devices installed in unit

For Intel NUC units, the client slots have a mounting feature to allow the NUC VESA mount posts to be used to secure the NUC devices to the Client Drawer slot. To install an Intel NUC device, attach the VESA mounting post on bottom of the NUC chassis.

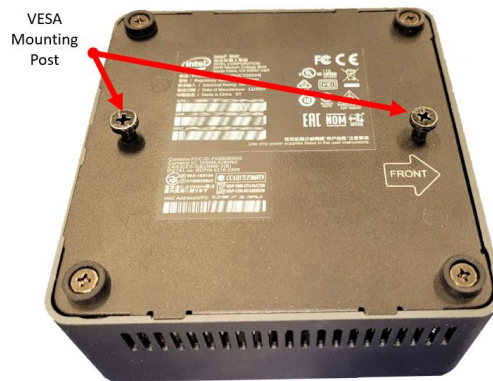


Figure 14 NUC mounting posts

Insert the NUC mounting post into the mounting feature on the slot bracket after attaching cables to the NUC.

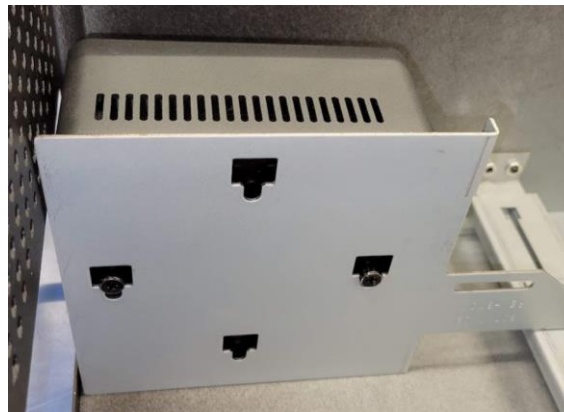


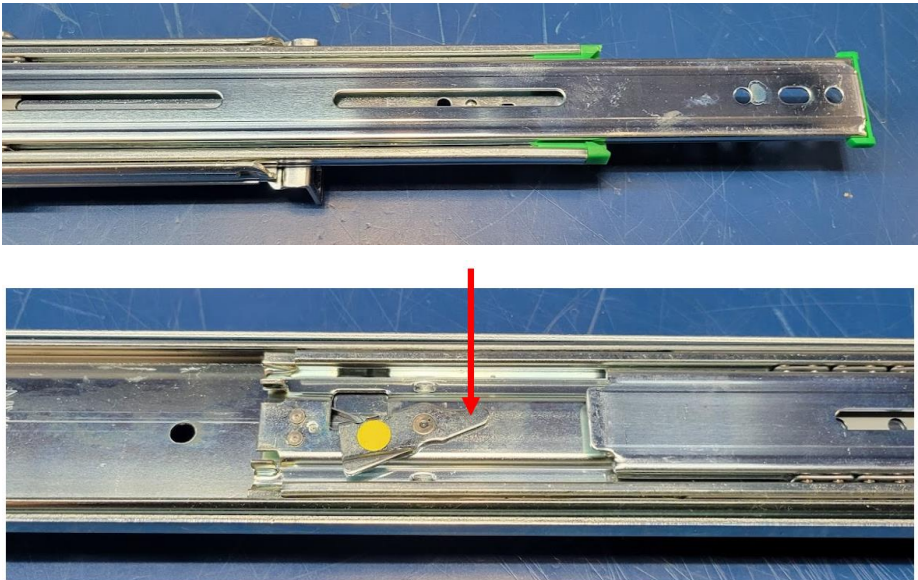
Figure 15 Intel NUC mounted on bracket


Installation in rack

Inserting and removing

The Client Drawer can be mounted into a standard 19" four post datacenter rack. (Note: two post rack option is available. Contact your reseller for details). The rail mount kit consists of a left and right rail kit that are mounted in the chassis and to the side of the chassis as well as associated screws.

The table below shows how to install and remove an A6108 blade from an A3100 chassis.

Step	Action
1	Remove both rails from the box and bag of screws. NOTE: When pressing the latch to open the front bezel, hold the bezel with one hand to ensure that the bezel does not fall.
2	Remove the screws labeled M4 x 6. These will be used to attach the rails to the side of the chassis.
3	On the left rail (marked with an L), pull the inner rail out until the locking mechanism is exposed.  NOTE: There is slight resistance when blade connectors are inserted into backplane connectors.

4	<p>Align the screw hole second from the front green tab with the screw mounting hole at the front center of the left side of the chassis.</p> 
5	<p>Attach two more screws in the visible screw mounting holes along the chassis rail.</p>
6	<p>Repeat the process on the right side with the rail marked with an R..</p>
7	<p>In the rack, locate the appropriate rack position. Using the supplied rack nuts or your own, attached, the left and right rails to the rack. Note that the out of box setting allows for a maximum extension of 28”.</p> <div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> <p>NOTE: For rails that are between 28 and 32 inches apart, the two nuts on the front half of the rail kit can be loosened to extend the kit further. After extending, the nuts must be re-tightened to ensure rail integrity.</p> </div>
8	<p>IMPORTANT: The total weight of a Client Drawer with all clients installed can reach 65lbs. Installing the client drawer onto the rails requires two people or a datacenter lift.</p>

Support

Required Items When requesting support for the chassis, the serial number can be located on the inner left wall. Remove the lid from the chassis to locate the serial number label.

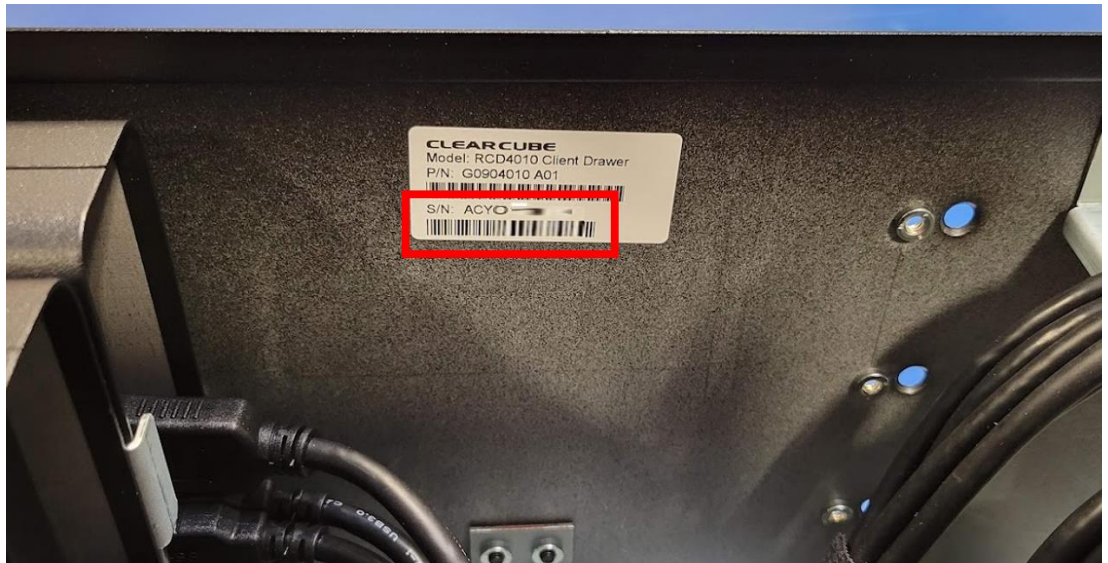


Figure 16 Serial number location

•

Contacting Support

Web	www.clearcube.com/support/
Email	support@clearcube.com
Toll-free	(866) 652-3400
Direct	(512) 652-3400

WEEE Disposal Guidelines

In the European Union, this electronic product falls under the European Directive (2002/96/EC) WEEE. When it reaches the end of its useful life or is no longer wanted, it should not be discarded with conventional waste, but disposed of at an approved designated recycling and/or treatment facility. Laws are different in each country, so please check with your local authorities for proper disposal instructions. For assistance, contact ClearCube at recycle@clearcube.com.

